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(54) Title: SYNTHETIC CHEMOKINES, METHODS OF MANUFACTURE, AND USES

(57) Abstract: The invention relates to synthetic chemokines, methods of manufacture and uses thereof. The synthetic chemokines of the invention include one or more amino acid deletions at the C-terminus relative to the corresponding wild type chemokine, which also can include one or more covalently attached polymers, as well one or more additional amino acid changes or chemical modifications. The invention also provides synthetic chemokines in a substantially purified oligomeric form, such as, in a monomer or dimer form. Further provided are methods for synthesizing the synthetic chemokines of the invention, pharmaceutical formulations and kits thereof, and their use as research tools and medicaments.





INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/10212

| A. CLASSIFICATION OF SUBJECT MATTER IPC: C07K 1/00(2006.01) | | | | | |
|---|---|-----|---|--|--|
| USPC: 530/350 According to International Patent Classification (IPC) or to both national classification and IPC | | | | | |
| B. FIELI | OS SEARCHED | | | | |
| Minimum documentation searched (classification system followed by classification symbols) U.S.: 530/350 | | | | | |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched | | | | | |
| Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WEST, MEDLINE, STN | | | | | |
| C. DOC | UMENTS CONSIDERED TO BE RELEVANT | | | | |
| Category * | Citation of document, with indication, where a | | | Relevant to claim No. | |
| X,E A,E | US 2005/0089970 A1 (BRADBURNE et al) 28 April 2005 (28.04.2005), entire document, see esp. paragraphs 0035, 0060-0097, 0184, 0194-0224. | | 7, 8, 37, 44, 49 | | |
| X A | Monocyte Chemoattractant Protein-1 Are Essential for Glycosaminoglycan Binding. Journal | | 1-6, 24-25, 27 7-23, 26, 32-49 | | |
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| Further | documents are listed in the continuation of Box C. | | See patent family annex. | | |
| Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of | | .T" | later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention | | |
| particular relevance "E" earlier application or patent published on or after the international filing date | | "X" | document of particular relevance; the cla considered novel or cannot be considered when the document is taken alone | imed invention cannot be d to involve an inventive step | |
| "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) | | -Y" | | | |
| "O" document | referring to an oral disclosure, use, exhibition or other means | | to a person skilled in the art | | |
| "P" document published prior to the international filing date but later than the "&" document member of the same patent family priority date claimed | | | | | |
| Date of the actual completion of the international search | | | nailing of the international search | en report | |
| 07 June 2006 (07.06.2006) | | | | | |
| Mail Stop PCT, Atm: ISA/US Commissioner for Patents | | | | ce for | |
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Form PCT/ISA/210 (second sheet) (April 2005)

| INTERNATIONAL SEARCH REPORT | International application No. PCT/US05/10212 |
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| Continuation of Box II Reason 2: The claims of the instant application do not contain a claim 28, and therefore claim presented herein. | 128 does not appear in any consideration of the claims |
| Claims 29-31 are drawn to a specific SEQ ID NO 1. The sequence listing as submit Form 225 was sent on 6/15/2005. However, the sequence errors are still present in made. | |
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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/10212

| Box | No. II | Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet) | | |
|--|-------------|---|--|--|
| This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons: | | | | |
| 1. | | Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely: | | |
| 2. | \boxtimes | Claims Nos.: 28-31 because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: Please See Continuation Sheet | | |
| 3. | | Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a). | | |
| Box | No. III | Observations where unity of invention is lacking (Continuation of item 3 of first sheet) | | |
| This | Internat | ional Searching Authority found multiple inventions in this international application, as follows: | | |
| 1. 2. 3. | | As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of any additional fees. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.: | | |
| 4. Rema | rk on P | No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee. The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation. No protest accompanied the payment of additional search fees. | | |